

# **Understanding Geriatric Dentistry and the Compassionate Approach**

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## Values of the Geriatric Patient, Addressing Age

When formulating a dental care plan for the geriatric patient there are multiple aspects to consider. The dentist or the dental hygienist must consider the patient's ability to comply with the ideal plan set forth. Compliance is not just whether the patient will obey your instructions for oral home care and recall visits; it is also about the patient's physical ability to comply. Furthermore, compliance involves the patient's behaviors and personality; their psychological stance regarding personal hygiene. If the dentist or dental hygienist finds that the patient may not be able to comply with the ideal care plan, the plan should be altered to better accommodate the patient. By doing this, by compromising, the dental team can achieve the best results and a better prognosis for the patient going forward.

"Old age hath yet his honour and his toil." –Alfred Lord Tennyson

It is important to realize that as providers you cannot group together all patients from age sixty to one hundred years old with the simple title of elderly. If you really think about it, that is forty years of life we have decided to lump together into one age segment. More respect and admiration should be given to those who reach old age, for they have experienced more of life and dealt with its misgivings. Those of advanced age have felt the toil in their body and they are the experts on how they feel. In the past, people were not living as long as they are now. It was more common to say someone lived a good, long life at the final age of seventy. Now days, we say that about those who live to ninety years old. Because our population is living longer and the percentages are growing in favor of elderly people, we must change the way we think about geriatrics.

Another thing to consider when treating elderly patients is that some sixty year olds are mentally and physically more similar to fifty or forty year olds. Whereas other sixty year old patients may present with worsening conditions and be more similar to someone in their seventies or eighties. The aging process is different for everyone. It is because of these differences that clinicians must assess each patient and provide unique care best suited to their needs.

Too many times on the clinic floor or in conversation with other dental professionals have I heard the terms 'elderly patient' and 'really, really old patient'. While the first term is respectable enough, the second is not acceptable. Describing someone as being really, really old does not truly give me a measure of their age or ability. Should I assume a 'really, really old patient' means the patient is not capable of caring for themselves? Or are they healthy, independent individuals who happen to be ninety years old? I feel there should be appropriate medical terminology to dissect the forty year span of life we are currently addressing as being elderly into two twenty year spans. For now, I will clarify my age groups by calling them elderly and advanced elderly for the eighty to one hundred year olds. Another thing to consider when addressing the age of your geriatric patient is your sensitivity and the sensitivity of the geriatric patient themselves. Some elderly patients do not wish to be called elderly because they find it offensive and it gives them the image of someone who is frail and weak. Young people also have this stereotyped image in their minds and do not wish to refer to a lively, healthy patient as being elderly. Due to this, I believe new medical terminology is sorely needed to create a neutral image that is accurate to the patient's age.

Not only must clinicians be sensitive, but they must also be analytical to provide the best dental care plan. The dental team must go through a geriatric patient's medical, social, and dental history with intense focus on every detail. These histories provide the clinician with the cause and effect previously recorded and how they can expect the geriatric patient to react and behave to future planned treatments. The dental team can see patterns and understand why certain outcomes occurred. Some outcomes could be due to the patient's values, rather than the medical decisions made.

When I access a patient's values, I am learning about their religious beliefs, cultural background, and unique personalities. These assessments are coupled with my knowledge of their socioeconomic status and personal identity regarding race and gender. Some geriatric patients are very mistrusting, questioning every decision made by the dental team. While all geriatric patients are encouraged to ask questions so that we may better educate them; their trust is vital to the success of the dental care plan. Without their trust, they may be noncompliant in oral homecare and skip dental visits because they think all medical professionals just want their money.

Sadly those elderly patients who fail to see the importance of oral hygiene and dental visits find themselves with more severe conditions than if they had sought treatment sooner. I find Charles Dickens captures this unfortunate circumstance well when he says, "Suffering has been stronger than all other teaching." I hope to prevent my patients from suffering and learning the hard way that they should have come for treatment sooner. I

want my dental colleagues to understand the importance of connecting with their geriatric patients so that a real relationship is built. That way the patient is more receptive to the dental team's instructions and recommendations. I always try to get the message across to my elderly patients that if they seek care consistently, we can catch disease and implement preventions before they become painful and irreversible.

The United States is a melting pot and because of this we have geriatric patients from many different backgrounds. I have had elderly patients from Asian countries that grew up thinking the harder and longer they spent brushing their teeth, the cleaner their teeth would be. This is a cultural value, one that promotes hard work and diligence in all aspects of life not just school or work. This persistent style of tooth brushing however has been known to cause gingival recession and abrasion, which leads to a loss of enamel and can result in tooth sensitivity or caries. It isn't just patients from Asian countries who display cultural tendencies in their oral health. In India, Hindus have a ritual of praying to their Gods and in the sixteen steps, chewing betel leaves occur afterwards. Betel leaves are medicinal; they are a stimulant and mouth freshener. The downside is that betel leaves create really heavy staining of the teeth. It forms very sticky dark brown stains that are very difficult to remove. This religious habit is not something all patients are willing to find alternatives to, but some geriatric patients who are very concerned about their brown teeth making them look older will try alternatives to the betel leaf to freshen their mouth. It is important for the dental team to come up with actions to counteract the use of betel leaves, should the patient decide not to change their habits. You can suggest to the patient to rinse their mouth directly after chewing betel leaves and to brush their teeth thirty minutes after.

The dental team must also consider the geriatric patient's personality. They must decide if the patient is just lazy and cannot be expected to brush twice a day and floss before bed. If that is the case, the dental team must find ways to motivate the patient or try other dentifrices that the geriatric patient would be interested in using. Some geriatric patients have no interest in brushing their teeth; they've been doing it their whole lives and it is quite boring. If their oral health is suited to an electric toothbrush, the dental team can recommend one in hopes that the patient will enjoy changing up the routine. Some geriatric patients have responded well and like using the electric toothbrush because it is fun and easy.

By talking to the patient and really listening to the patient's values, the dental team will be able to provide better, more compassionate care. No two patients are alike and everyone comes from different viewpoints. Having respect for the patient and how they think and feel about their health is crucial for the dental team to achieve success. Treatments cannot and should never be forced on a patient simply because it is the right plan of action. Treatment must be accepted by the patient and in some cases with geriatric patients; it must be understood by their care providers. The time should always be taken to explain your concerns as a dentist or hygienist and equal amounts of time should be taken to listen to what the patient is concerned about. I always make sure I have understood the patient's values before I place any instruments in their mouth. Once I have done this, I can proceed with confidence that I am doing the best I can for this patient and that the patient will do their very best to keep up their home care so that we reach a happy, healthy place in the future.

## Edentulism in Geriatric Dentistry

There are many contributing factors when it comes to geriatric dentistry. The Dentist and Hygienist should understand that it is not just the treatment they provide in the office that concludes the realm of geriatric dentistry. The dental team must understand a geriatric patient's values, background, physical limitations and use their knowledge of statistics concerning geriatric patients in order to decide what steps need to be taken for treatment. As a provider, if you know the different statistics surrounding various patients, you will have a good idea of what risk factors and oral diseases will be prevalent for certain patients.

While geriatric dentistry may not seem like a big field now, it is expected to grow in the future. "In the USA, by 2030 it is projected that there will be about 72.1 million older people, more than twice their number in 2000. Individuals aged 65 and older are expected to grow to become 19% of the US population by 2030 (Administration on Aging, 2012). By 2050, it is projected that there will be about 88.5 million older adults, 20.2% of the US population (US Census Bureau, 2008a)." With a growing number of senior citizens, there is going to be more demand for dentist and hygienist to understand their oral health risk and provide treatment plans accordingly. It won't be enough in the future for the dental team to only understand the best methods of treatment for adults because treating elderly patients is different and unique compared to the average adult patient.

"More helpful than all wisdom is one draught of simple human pity that will not forsake us." –George Eliot

As a dental hygienist, it evokes pity in me to see elderly patients who are edentulous. My mind is analytical and provides me with all the information about what the edentulous patient is at risk for, the discomfort and psychological impact the patient is experiencing. My heart however doesn't provide me with information, just emotion. I imagine if my geriatric patient were my mother, grandfather, or uncle and I feel a great need to help this patient be healthy and comfortable; to come to terms with their edentulism and be happy despite it. I have seen dentist become frustrated with creating a denture that the patient is comfortable with, having to reshape and rebuild the appliance. I wish to remind them that while they only spend an hour or two customizing the appliance, the patient has to spend each day of their life wearing the appliance.

There are lots of factors to consider for the edentulous patient. The first major task is to educate the patient and their family or care providers that the absence of teeth does not equate to the absence of dental visits. Edentulous patients still need to see a dentist and a hygienist regularly to maintain their current health status and watch for any developing diseases. Edentulous patients are at a higher risk for bone loss than other patients with functioning teeth. The lack of teeth means there are no roots inserted into the jaw bone. The roots of the teeth play a very important role in the density of the jaw bone. In good oral health, the height of the bone comes up to the cemento-enamel junction, also called the CEJ. In poor oral health, such as with periodontal disease, the level of the bone will start to fall below the CEJ. This progresses with bone loss moving apically or down towards the root, leaving deep pockets in the gums and exposing the roots of the teeth. The edentulous patient has typically already suffered bone loss before



completely losing their teeth. This is why it is crucial to preserve the current levels of bone that is left because they have already been placed at a disadvantage concerning bone density.

Ideally when the dental team sees an elderly patient who is losing their teeth and the prognosis of retaining them is slim to none, they will recommend implants and bridges. The advantage of implants is that they preserve the patient's current bone level. By placing a metal screw in the jaw bone, it encourages the bone to grow around the implant and hold fast. Implants still have the capability to become diseased though. Measures must be taken to prevent periimplantitis and gingivitis.

While edentulous geriatric patients are still common today, the prevalence of patients without teeth is going down. "A report conducted by the US National Centers for Health Statistics using the US National Health and Nutrition Surveys of 1988– 1994 (NHANES III) and NHANES 1999– 2004 found that the prevalence of edentulism declined in the USA over these two time periods from 34% to 27% among adults aged 65 and older (Dye et al ., 2007)." This is good news but the fact is that about 27% of geriatric patients are edentulous. This is a number that I personally hope we will continue to see reduced in the future. Though with the increasing number of geriatric patients expected in the future it could actually cause the number to remain the same or go up. Whether there will be more edentulous elderly patients, the same, or less in the future depends on a few different things. One of those things is as simple as the patient's socioeconomic status.

If a patient is well educated and has a higher income, they are more likely to visit the dentist and hygienist regularly. They are also more likely to receive the preventative care that is necessary to prevent edentulism from happening in their future. On the other side, a patient with less education and a low income will be more likely to skip dental visits due to cost and lack of understanding of how important oral health is to systemic health. This patient has a higher chance of experiencing oral disease and edentulism. Not to mention the negative impact of poor oral health on their overall health.

When a dentist or hygienist first lays eyes on their geriatric patient, they will be able to determine a few important factors right away. A patient's ethnicity gives immediate insight to their risk factors, but it is important to always make your treatment plan and diagnosis based on what you have observed clinically inside their mouth. Not all statistics apply to everyone; there are always a few patients who stand outside the normal findings in a good or bad way. "In the USA, minority elders have been identified as a key demographic group at greatest risk for edentulism (US Department of Health and Human Services, 2000). Black elders, in particular, have higher rates of edentulism than non-Hispanic Whites and Mexican Americans (Dye et al ., 2007; Schoenborn & Heyman, 2009; Wu et al ., 2011a)." Those minorities who are at the lowest risk of edentulism in old age are Asian populations. It is also important to note that Native Americans have the highest rates of edentulism. As a society we should examine why specific ethnic populations have higher rates and why others have lower rates. Dentistry often falls secondary health-wise for those who are financially struggling. Coming first is doctor visits. For those who are living far below the poverty line, visiting a doctor may not even be a pressing concern, so dental visits may be seen as extravagant and unimportant. Often for this group of people, emergency care is the only care they receive.

As a hygienist it is my goal to provide the most comprehensive care for all patients. It is also my goal to provide more specialized care for geriatric patients and educate others on the importance of dental care in advanced age. Most people have the concept that once you get your permanent teeth and make it through puberty and young adult life, your teeth are set. There is no setting for teeth, they are constantly in flux and constantly need attention. The body changes throughout our lifetime and so does our teeth.

### Periodontal Disease in Geriatric Dentistry

“There is still no cure for the common birthday.” –John Glenn

It was initially believed that with age one will develop periodontal disease. It was a given; the dental team considered it to be a fact of life, much like rain falling from the sky. In the past it wasn't a surprise to see older patients present with some form of periodontal disease. Most dentist treating geriatric patients expected them to have a loss of connective tissue attachment, persistent inflammation, and alveolar bone loss. Due to extensive research, dental healthcare providers now know that periodontal disease should be prevented and arrested in elderly patients. Periodontal disease in geriatric patients is no longer thought of as an acceptable oral health status. Today steps are taken to teach the patient that periodontal disease should not be a part of their aging process.

It is important for the dental team to recognize the early signs of periodontal disease and take the necessary steps to arrest the progress of the disease. Periodontal disease is broken into two different groups, gingivitis and periodontitis. The general public is most familiar with gingivitis and how it affects them. This is partly in thanks to years of dental products advertising and instructing the general public to use their brand of toothbrush, floss, or mouth rinse to prevent gingivitis. While gingivitis is a clinical term it has been added to the public's vocabulary and can generally be used as a lay term. Periodontitis however cannot be used as a lay term when talking to patients because the disease isn't well understood by the public. It is the dental team's job to educate their patients and to be thorough in their explanation of the patient's periodontal status. Only after the patient really understands the disease going on inside their mouth can real progress be made towards halting the disease.

Gingivitis is characterized by gingival inflammation. In periodontitis there is gingival inflammation as well as a "pathological detachment of collagen fibers from cementum and apical migration of the junctional epithelium." Gingivitis can be reversed, but periodontitis is not reversible. The connective tissue and bone that is lost in periodontitis is lost forever. It is critical to begin treatment to arrest the disease and for the patient to understand the severity of the disease. If left untreated, periodontitis will lead to total destruction of the connective tissue and bone with tooth loss. Periodontitis usually occurs after gingivitis but gingivitis does not always preclude periodontitis. There are many factors involved as to why a patient will develop periodontal disease and which patients are more susceptible than others.

Geriatric patients are more commonly seen with mild, moderate, or severe periodontal disease. This doesn't mean all elderly patients will have the disease, but rather they will have more risk factors for developing periodontal disease. Periodontal disease is thought of as being more prevalent among geriatric patients because they have been exposed to contributing risk factors for a longer period of time, resulting in the disease. Oral biofilm removal is key to the prevention of periodontal disease. Biofilm can be removed every day through tooth brushing. For some geriatric patients though, the seemingly simple task of brushing your teeth can be complicated by physiologic factors.

A common ailment among elderly patients is arthritis. Arthritis of the hands and in the arm will prevent patients from brushing properly or at all due to discomfort and pain. Suboptimal oral health over a period of time invites gram negative bacteria to flourish in the mouth instead of gram positive and signals the destructive processes to occur. Systemic diseases, such as diabetes mellitus, "physical and mental impairment, polypharmacy, decreased immune function, and altered nutritional status interact synergistically with other well-defined risk factors to increase susceptibility to periodontal disease." The dental team should also consider the patients dental history. An elderly patient who last saw the dentist fifteen years ago will be at a higher risk for periodontal diseases compared to the patient who has kept up consistent dental visits throughout their life. An inconsistent dental history can be contributed to socioeconomic factors, lack of education, or simple fear of going to the dentist. Dental anxiety will keep a lot of patients from going to the dentist even if they understand the reasons they should go. Often these patients do not appear for an appointment until they are in pain.

Another risk factor for periodontal disease is smoking. Smoking is a risk factor that can be eradicated, sometimes more easily than other risk factors. Diabetes cannot be eliminated, but smoking can. Geriatric patients who are smokers should be encouraged to join a smoking cessation program. While it is important for the dental team to offer counselling to all patients who smoke, it is especially important that the dental team does not approach the geriatric patient with the attitude that if the patient hasn't quit already, they aren't likely to quit now. Some dental team members may also be confronted with geriatric patients who think it is useless to quit smoking because they don't think they are going to live twenty more years anyways. This dismissive, self-debasing attitude is sad and shocking, but not impossible to work with. It takes more listening and understanding the patient's values in order to make an impact on how they view their personal health.

### The Systemic Connection between Cardiovascular Disease and Oral Health

Patients of any age can present with cardiovascular conditions in the dental office or clinic. However, the most common age group for cardiovascular diseases is among the elderly. In nearly all developed countries, cardiovascular disease is the most common cause of death. In the United States geriatric patients are expected to increase in the future and the prevalence of cardiovascular disease is expected to grow as well.

A topic of research that has increased greatly over the past few years is the relationship between oral health and cardiovascular diseases. "The major risk factors associated with cardiovascular diseases are dyslipidemia, low level of high density lipoprotein, smoking, hypertension, and diabetes as well as periodontal disease." The American Heart Association states that there is "no conclusive evidence that preventing gum disease — periodontitis — can prevent heart disease or that treating gum disease can lessen atherosclerosis." However it is agreed that an association exist between oral health and heart health. Currently there isn't enough conclusive research evidence to prove that oral disease can lead to systemic disease and vice versa.

If a patient has an infection in the mouth, such as from periodontal disease, the bacteria can enter the blood circulation and contribute to atheromatous or thrombotic functions. It was initially believed that dental procedures contributed the most to creating a bacteremia that negatively impacted the heart. Now we know that a patient's everyday activities such as brushing, flossing, chewing food, and using wooden toothpicks contribute much more to the creation of transient bacteremia. This bacteremia is essential to understanding how infections in the mouth can have a negative impact on the body systemically. When a diseased mouth endures trauma at the gingival margin, which can occur by using a wooden toothpick, the dense microflora on the surface of the oral mucosa is released into the bloodstream at the site of trauma.

In geriatric patients the immune system is not always functioning in tip top shape. There are many reasons why an elderly patient's immune system may be run down. Systemic disease and prescription drugs such as

corticosteroids and TNF inhibitors can weaken the immune system. When the immune system is weak oral infections can be problematic. In turn, an oral infection will run down the immune system further and possibly open the door to other systemic conditions. This link should persuade the dental team to be more proactive in motivating their geriatric patients to commit to a home care routine that promotes oral health.

“The language of truth unadorned is always simple.” –Marcellinus Ammianus

The correlation between oral health and heart disease should be explained in lay terms to the geriatric patient. This is as simple as saying, what is inside your mouth will eventually travel to the rest of your body and most importantly it will find its way to your heart. By keeping the mouth free of gum disease and infections we can keep the bacteria away from the heart and alleviate any extra stress put on the heart. Patients who have a history of infective endocarditis should be aware of the relationship between their oral cleanliness and the susceptibility of having IE again should they allow gum disease to develop or progress.

I believe that in the future there will be conclusive evidence to prove gum disease is causal to heart disease. Already we know that the bacteria *porphyromonas gingivalis*, found in periodontal disease, is commonly found in heart disease. It is believed that *P. gingivalis* increases the amount of cholesterol and plaque within the arteries and leads to an increased inflammatory response. Cardiologists already require their patients to receive dental care before and after procedures, at the appropriate time intervals, to increase the success and prognosis of the patient’s health. The dental team should make it a priority to take the time and educate geriatric



patients on the correlation between heart health and oral health. I believe that educating the patient and guiding them with their home care will reduce the prevalence of heart disease among the elderly. If we dental professionals do not take the time to educate our patients, we are being neglectful and unintentionally contributing to the occurrence of heart disease.

### Geriatric Dentistry and Oral Esthetics

“Behind every exquisite thing that existed, there was something tragic.” –Oscar Wilde

Historically people only visited the dentist to alleviate pain, typically associated with the teeth. In the past, pain relief often resulted in extraction of the tooth causing pain. Not much thought was given to preservation of the teeth through preventative measures or to fighting oral infections. One of the earliest restorative materials for decayed, broken, or otherwise damaged teeth was amalgam. The material was satisfactory but not esthetic. In modern dental practice, esthetics plays a big role. Patients of all ages are concerned with how their teeth look. Geriatric patients are usually the most concerned though.

Baby boomers, born in the 1950's and early 1960's, have played a big role in charting the course of dentistry. It is partially in thanks to baby boomers that esthetic dentistry has grown and evolved to what it is today. As the baby boomers became teenagers, many dentists became orthodontist. As they grew up, the trend faded and orthodontics were then

aimed at young adults. Traditionally, crowns were molded to gold or cement and were very expensive. The growing demographic of patients needing crowns and fillings led to a revolutionary breakthrough, bonding. Bonding porcelain crowns was much less expensive, "infinitely sturdier and far less prone to fracture."

Modern dentistry has evolved greatly over the years concerning esthetics. Teeth restorations are now nearly undetectable. Composite fillings come in different tooth shades and are preferred over traditional amalgam fillings because of their natural appearance. Partial and full dentures were once clunky and unnaturally white. This too white appearance in partial dentures was a big problem esthetically because it was obvious which teeth belonged biologically to the wearer and which were the fake replacement teeth.

Geriatric patients who are concerned with their esthetics want a mouth that looks healthy and natural. Some patients will ask to replace their old amalgam fillings because they feel it makes them look older. They have decided that the visibility of the restorations in their mouth tell a story of struggling with health and age instead of the effortless youthful appearance they desire. While it is true that natural tooth colored restorations will make a geriatric patient look younger, it isn't necessary to remove good amalgam restorations. More and more today, there are dental practices that specialize in esthetics. They understand that some procedures such as replacing amalgam with composite are not due to restoration failure, but solely for the happiness and acquired self-esteem of the patient.

There are many different aspects of esthetic dentistry that are functional and superficial. Dentures are not thought of as an esthetic appliance because the systemic effects on a patient not being able to chew hard foods results in poor body functions and a negative life prognosis. Veneers on the other hand are mostly cosmetic. Veneers are thin porcelain cemented onto the front of the teeth to correct stains, gaps, or cracks that the patient finds unsightly. Veneers are placed by removing some enamel on the surface of the teeth, called etching. Then the cement can be placed and the porcelain put on top. Since enamel is removed in the procedure, the teeth have to be very healthy to begin with; further proving veneers are not medically necessary but purely cosmetic.

When geriatric patients evaluate the esthetics of their mouth, they are looking at the presence of teeth, the color, and their smile. A smile can be beautified with veneers and teeth can be replaced with implants, crowns, bridges, or dentures. Even with these restorations, some geriatric patients will say they still don't see the same face from years ago. With a perfect pearly white smile, patients will note that the bone structure of their face seems to have changed with age. They would be making a correct observation. The bones of the face, particularly the jaw lessens in density with age. Systemic diseases and edentulism further worsens their bone density levels. Partially edentulous patients will see the side of their face lacking teeth change dramatically over the years if not corrected with prosthesis or restorations.

Edentulous geriatric patients will look in the mirror and see sagging, sunken in cheeks and a tightly wrinkled mouth. Lower bone levels and missing teeth create a facial profile that many geriatric patients are not happy with. They suffer not just physically, but psychologically too. The feeling of 'falling apart' throughout aging is common, but to see the shape of your bones change is depressing for many patients. Thankfully there are options to achieve a more youthful appearance through dentistry and without visiting a plastic surgeon. The nonsurgical facelift provided by dentist is relatively quick, much safer and far less invasive than plastic surgery. The results of this procedure are remarkable. It works by repositioning the muscles of facial expression.

"The muscles of facial expression are responsible for the appearance and function of our facial architecture." When the teeth and bone levels are healthy the face is held taut and proportionate. To correct a wrinkly mouth, veneers can be placed. By overcontouring, they will support the orbicularis muscle and by lengthening them they will hold out the lower lip. The effect is a more full mouth that is properly supported resulting in less wrinkles. To address sagging cheeks and nonexistent cheekbones; crowns placed on the posterior molars at higher levels than the teeth previously were, will support the zygomatic and buccinator muscles. The patient will now see a smile that isn't straining, but is natural and attractive. The lips are improved, jowls will disappear, nasolabial lines softened, and the face will appear tauter.

Orthodontics is also often used to achieve the nonsurgical facelift. Every case is different and requires different treatment plans. It is important to note that these procedures can take place over the course of a few months to allow the bones and muscles to reshape themselves to the

changes made within the mouth. These procedures are a great option for geriatric patients who are really bothered by their appearance and do not have other pressing dental diseases, such as periodontal disease. The most important thing to remember when addressing a patient's concerns about esthetics is that their oral health must come first and the esthetics will come secondary. Sometimes the desire to undergo esthetic procedures will motivate a geriatric patient to take care of their oral health. This is a positive impact and the results after undergoing esthetic procedures also has a very positive impact on their self-esteem and outlook.

### When Dentistry Isn't Perfect

"Medicine is not only a science, it is also an art. It does not consist of compounding pills and plasters; it deals with the very processes of life, which must be understood before they may be guided."

-Paraclesus

All dental professionals strive to provide the best care they can for their patients, but sometimes their best efforts are not enough. Many medical professionals will be faced with malpractice claims at least once in their career. Even more common than malpractice by the dental team are the iatrogenic effects a patient may undergo.

A good example of this happened to my aunt. At 69 years old she would be considered a geriatric patient, but don't tell her that. She goes to yoga class twice a week and sticks to a healthy diet. She wanted to achieve

a younger appearance by whitening her teeth professionally at the dental office. After the first visit, she wasn't happy with the level of whitening. She thought the bleaching would have turned out whiter and asked the dentist to schedule her for a second visit. After receiving a second round of bleaching a few weeks later, my aunt was happy with her appearance. She had some sensitivity for a few days after and thought it would go away. When it didn't subside, but actually seemed to get worse; she called her dentist and complained. After talking with her dentist, he admitted that she likely suffered from sensitivity because her two whitening treatments were not spaced out far enough apart. Needless to say my aunt was very upset and switched to a new dentist to help alleviate her sensitivity.

As a clinician this situation can be avoided by explaining not just the benefits of the procedure you are providing to the patient, but also the risks. Often the dental team likes to focus on how the prescribed treatment will be beneficial for the patient and gloss over the negative impacts because they do not believe the patient will suffer those negative effects. Polishing for example, is a very common procedure performed as part of a prophylaxis, or cleaning. Its beneficial effects prevent the biofilm from adhering to the tooth structure, which slows down the formation of plaque. Yet how many times has the patient been told of the negative effects of polishing? I asked my friends and family this question and they didn't know polishing could cause any undesirable effects. Polishing removes the surface layer of enamel and reduces the amount of fluoride in the tooth structure. As a clinician we must include the patient as an active member in the treatment plan and make decisions together with the knowledge of treatment outcomes and side effects.

I believe in geriatric dentistry, clinicians are lacking the compassion and attention necessary to provide quality care. When the dental team performs procedures that end in failure or worsening of the original condition, the patient becomes angry and mistrustful. The reason for the iatrogenic factors may be due to clinician error, non-compliance by the patient, or developing systemic conditions that worsen the prognosis of an oral disease not foreseen by the patient or clinician. Whatever the reason, the patient often feels they have been a victim of malpractice. When this happens, many geriatric patients will avoid going to the dentist. They feel money has been lost for nothing; pain suffered unduly, and even fear that their terrible experience will be repeated if they go the dentist office again. The implications of bad dental experiences reaches further than just the mental and physical trauma; it actually contributes to future disease and complications because now the patient will not come to the dentist until they are in severe pain or cannot masticate properly. Often times when geriatric patients appear only for emergency appointments, the damage is so progressed that we can only hope to arrest the oral disease in its current state and alleviate pain.

In dentistry and especially in geriatric dentistry it is important to have open communication with the patient that results in an increase in health literacy. It isn't enough for the clinician to be an expert in their field, they must also be able to connect with their geriatric patients and make them a part of their oral health care. A real relationship with your geriatric patient will often result in your acknowledgement that compromise is needed in order to formulate the best treatment plan and see the best results. Treatment requires an analytical mind to create the best scenario for the patient's health, but administering this treatment is nothing short of an art.

People will have conditions you can find written in your textbooks, but a true healer seeks to treat the person, not just the disease.

### Community Outreach in Geriatric Dentistry

“Let no one ever come to you without leaving better and happier. Be the living expression of God's kindness: kindness in your face, kindness in your eyes, kindness in your smile.”

–Mother Teresa

While geriatric dentistry is expected to grow and become predominant in dental offices and clinics; many in the elderly population will not be able to go to an office for care. What I have noticed while researching and examining other top experts in the field of geriatrics is that researchers are just beginning to realize that while the geriatric population is growing, this doesn't automatically equate to seeing them in the dental chair. Many elderly people have health complications that keep them homebound and unable to visit a dental office for care. There are also those who are medically compromised that could potentially visit a dentist if they arranged for special transportation but don't due to financial restrictions. Dr. Mark S. Wolff DDS, PhD, professor and chair of the Department of Cariology and Comprehensive Care at NYUCD, and the leader of the NYU Dentistry Dental Van Program says there are many reasons why the elderly aren't getting care; “Many of these reasons include a shortage of dental providers trained and willing to care for an increasingly medically compromised aging America, including those suffering from debilitating and life-threatening illnesses. Many of the difficulties associated with receiving care include problems for



aging patients in physically reaching the dentist because of transportation problems or being homebound.”

One solution to this problem is mobile dentistry. New York University College of Dentistry has a mobile dental van that operates in all of the five boroughs bringing dental care to underserved populations. “Smiling Faces Going Places”, the name of the van, has begun just this year to provide care to elderly populations in need. The services provided are examinations, x-rays, preventative care, fillings, simple tooth extractions, limited prosthetics, patient education, and home care instructions. The dental van does a good job reaching out to our elderly community, but it best serves those who are able to leave their house and meet at the van’s location. For those who are bedridden, it is up to the care takers or the elderly person themselves to arrange for care at their home. Essentially it is important to remember that while the van can go anywhere on outreach; we can’t know who needs our help unless they reach out to us first.

For geriatric patients who are unable to leave their home, some private practices also provide outreach services. Often these clinicians do not have a dental van, but they have a portable dental unit that looks like a giant suitcase. These portable dental units have the air syringe, saliva ejector, high volume ejector, and low/high speed hand piece that is commonly found on the dental unit in a clinical setting. Hand scaling tools and other armamentarium, such as gauze and cotton rolls, are easily transported in cases. Clinicians who are attending to a geriatric patient at their home will find that patient positioning is not always optimal but success can be achieved with some modifications. Patient comfort and clinician visibility is key to completing a successful procedure outside of the clinic. To

aid in visibility it is recommended that the clinician have a headlamp or bring a portable dental light along on for the appointment. There may not be room for a free standing dental light though and a headlamp is ideal in these situations.

I think more outreach programs should be created to match the growing population of geriatric patients. Particularly there needs to be more programs where the dentist or hygienist provides care bedside. In hospitals so many geriatric patients are not getting the oral care they need. Nurses are knowledgeable about providing oral care but many are uncomfortable conducting the necessary procedures. In the future we may see dental hygienist provide these procedures to geriatric patients staying in hospitals for extended periods of time.

Initially I was concerned about geriatric patients receiving the same level of care through mobile dentistry that they might receive in a clinic. I now think the care they receive is very good quality and that there's only one real downside. That downside concerns clinicians visiting geriatric patients inside their homes; in that environment it is very difficult to maintain disease control. You cannot spray CaviCide and wipe clean the inside of other people's homes. You will still be able to maintain infection control, but you must accept the risk of working in an environment that isn't sterile. After some research I've come to believe that the benefits of dental outreach programs far outweigh any negatives they might have. Community outreach is a kindness that clinicians must show; we have self-respect for the knowledge we harbor and in turn must share this knowledge with as many people as we can. From time to time, we clinicians need to step outside our shiny offices and care for those in need just for the sake of

caring. If we can give more of our days to this kind of work, I think even Mother Teresa would give us a small smile.

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